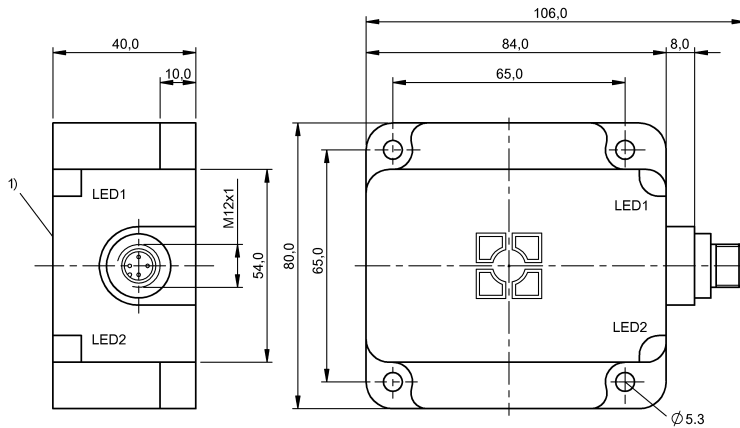


**BES Q80KA-PSH40B-S04Q**  
**Ordering code: BES0227**

**Inductive sensor**  
**80x106x40 mm**

**DC, direct current**  
**PNP/Normally open (NO)**  
**Sn = 40 mm**  
**Flush (shielded)**

**BALLUFF**  
*sensors worldwide*



**Characteristic data**

Eff. switching distance $S_r$	40 mm
Tolerance $S_r$	$\pm 10\%$
Assured operating distance $S_a$	32 mm
Hysteresis $H$ max. (in % of $S_r$ )	15 %
Repeat accur. $R$ max. (% of $S_r$ )	5 %
Ambient temperature	-25...70 °C
Temp. drift max. (% of $S_r$ )	10%
Switching freq. $f$ max.	50 Hz
Ready delay $t_v$ max.	100 ms
Utilisation category	DC 13
Function indicator	Yes
Power-on indicator	Yes
Short-circuit protected	Yes
Degree of protection as per IEC 60529	IP67
Protection class	II
Protected against polarity reversal	Yes
Protected against reverse connection	Yes

**Electrical data**

Operating voltage	
Rated operating voltage $U_e$ DC	24 V
Ripple max. (% of $U_e$ )	10 %
Voltage drop static max.	2,5 V
Rated insulation voltage $U_i$	250 AC V
Effective operating current $I_e$	200 mA
No-load current $I_o$ damped	15 mA
No-load current $I_o$ undamped	12 mA

Off-state current $I_r$ max.	20 $\mu$ A
Minimum operating current $I_m$	0 mA
Rated short circuit current	100 A
Output resistance $R_a$	33.0k + D / 33.0k + D
Load capacitance max. (at $U_e$ )	0,5 $\mu$ F
Principle of operation	Inductive

**Mechanical data**

Housing material	PBT
Sensing surface material	PBT
Tightening torque max.	3 Nm
Connection type	Connector
Connector type	M12x1-S04
Shock rating	Shock, half-sinus, 30 gn, 11ms
Vibration rating	55 Hz, 1 mm ampl., 3x30 min
Degree of contamination	3

**Basic data**

Basic standard	IEC 60947-5-2
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**Remarks**

The sensor is functional again after the overload has been eliminated.  
 Embeddable: See installation instructions for inductive sensors with extended switching distance 851745.  
 LED 1: Function; LED 2: Operating voltage  
 With connector, e.g. BKS-S 20-... total length = switch length +18 mm.  
 Recommended mounting: Screw ISO 4762 M5x16 and washer DIN 125 A 5.3.



Definitions see main catalog

subject to change

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